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THE GARDEN CALENDAR

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U. S. DEPARTMENT OF AGRICULTURE

A radio discussion by W. R. Beattie, Bureau of Plant Industry, delivered in the Department of Agriculture period of the National Farm and Home Hour, broadcast by a network of 50 associate NBC radio Stations, Wednesday, February 26, 1936.

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Hello folks. This morning the mocking bird, that to my mind very foolishly remained with us all winter, was singing and there is every indication that spring is just around the corner here in Washington. I am like the old negro in the Uncle Remus stories and am ready to say "Gwan away from here Ol'Man Winter an doan you come back no mo." But the Potomac river is still filled with ice and we have several inches of frost in the ground.

For several days I've been watching the gradual disappearance of a pile of snow in my back yard. Originally that pile was four or five feet in height but during the past week when the temperature has been above freezing part of the time that pile of snow has just gradually disappeared and I noted this morning that it is all gone although no water seems to have run away from the spot where it was. That means that the water from the melting snow has gone into the ground and it also means that, in this section at least, there is now a great abundance of moisture in the soil. Now the question is, how much of that moisture can the soil hold and how long will the supply last in case we do not have sufficient rainfall to maintain the supply.

If you take a sponge, dip it in water a few times and squeeze it out it will still retain considerable moisture but if you expose the sponge to the air it will soon lose that moisture. If you dip the sponge in water and do not squeeze it out it will hold a large amount of moisture and may not completely dry for days. The amount of moisture that the sponge will hold depends upon its texture. It is the same with our soils, the more organic matter, or spongelike material, they contain the more moisture they will take up and retain.

It may seem a little early to be talking about watering our gardens and truck patches, but I dare say a lot of us are going to find some form of irrigation very helpful in our gardens before the summer is over. In this connection two problems confront many of our gardeners and truck growers. The first problem is that of an adequate and plentiful water supply, and the second problem is how to apply the water to the crops. Right now is the time to be thinking about the water supply, perhaps building a storage reservoir or pond or putting down a large well. Some folks are lucky enough to live where artesian or flowing wells can be secured that will give an abundant supply of water suitable for the home and watering the garden. Others are located on or near the shore of some large pond or lake from which they can pump the water supply while more of us may have to depend upon wells and impounding small streams. My thought is that we should give this matter of water supply attention now before the rush of spring work comes on.

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With regard to the second point, that of getting the water to our crops, I simply want to say that there are three main methods of irrigating gardens and crops generally, the overhead or sprinkler system, the furrow or flooding system and the sub-irrigation or underground system. I will take these up and discuss them later but in the meantime if any of you are interested in this matter of irrigating your gardens and will write me I will send you bulletins that cover the subject pretty thoroughly.

Now, I want to return to that question of "soil sponge" for just a moment. Our soils are just like the sponge and retain more or less moisture according to the amount of spongelike or humus material that they contain. The crying need of most of our soils is for more humus and with the growing scarcity of manure our gardeners are compelled to turn to other sources of organic matter for incorporating with their soils. On my desk I have a bulletin of the Ministry of Agriculture of England on the "Manuring of Vegetable Crops." In this bulletin the author lays particular stress upon the use of green crops for adding humus to the soil, and strangely enough, he cites numerous experiments along this line that have been conducted in the United States. Emphasis is placed upon the importance of crop rotation, even in small gardens, and in keeping the ground constantly occupied with some crop that will add humus to the soil.

Mention is also made in this bulletin of the use of many kinds of waste products as manures. These include feathers from poultry packing plants, damaged seeds and meals, poultry house refuse, converted city refuse, sewage sludge from the converting plants, old bones and animal refuse, in fact anything of a harmless nature that will add organic matter and plant food to the soil. Surplus straw and leaves are converted into compost by the addition of chemicals and the necessary amount of water, in fact nothing is allowed to go to waste by these English fardeners.

We can add very materially to the humus content of our garden soils by simply following the rule of keeping something growing on the land all of the time and turning all available organic matter such as corn fodder, bean tops and even weeds into the soil to replenish the organic matter and thereby increase the moisture retaining power of our soils. I believe that one-third of our garden lands could profitably be devoted to soil improving crops each year. In addition we can increase the yields on the remaining two-third by proper cultural practices and irrigation, but more about the irrigation later.

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